In the claims:

- (Currently Amended) A catalyst carbon nanotube composition, comprising:
 - a catalyst comprising Co and Mo disposed on a support material wherein the majority of the Mo occurs as dispersed Mo oxide clusters and the majority of the Co initially occurs in a $CoMoO_4$ -like phase as $CoMoO_4$ with the Co therein primarily in an octahedral configuration, and wherein the $CoMoO_4$ -like phase $CoMoO_4$ occurs substantially disposed upon the dispersed Mo oxide clusters: ; and single walled carbon nanotubes disposed upon the catalyst.
- (Currently Amended) The catalyst <u>carbon nanotube</u> composition of claim
 wherein the support material <u>of the catalyst</u> is silica.
- 3. (Currently Amended) The catalyst carbon nanotube composition of claim 1 wherein the molar ratio of Co:Mo of the catalyst is less than 3:4.
- 4. (Currently Amended) The catalyst <u>carbon nanotube</u> composition of claim 1 wherein the support material <u>of the catalyst</u> is not a carbon nanotube.
- 5. (Currently Amended) The catalyst carbon nanotube composition of claim 1 wherein the Mo oxide clusters of the catalyst comprise Mo oxide clusters having a domain size between that of MoO₃ and heptamolybdate.

6-29 (Cancelled)

- 30. (New) The carbon nanotube composition of claim 1 wherein the majority of the single walled carbon nanotubes disposed on the catalyst have a diameter between about .7 nm to about .9 nm.
- 31. (New) The carbon nanotube composition of claim 1 wherein the majority of the single walled carbon nanotubes disposed on the catalyst have a diameter between about .9 nm to about 1.2 nm.
- 32. (New) The carbon nanotube composition of claim 1 wherein the majority of the single walled carbon nanotubes disposed on the catalyst have a diameter between about 1.3 nm to about 1.7 nm.